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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,962	12/31/2003	Hiroaki Kuwano	053969-0160	6222

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EXAMINER	
KARIKARI, KWASI	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/747,962	KUWANO ET AL.	
	Examiner	Art Unit	
	Kwasi Karikari	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,8-14,17 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,8-14,17 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 12/31/2003, 08/31/2003 and 12/21/2005 and are in compliance with the provision of 37 CFR 1.97, have been considered by the Examiner, and made of record in the application file.

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 8-14, 17 and 18 have been considered but are moot in view of the new ground(s) of rejection.

4. Claims 5-7, 15 and 16 have been cancelled and claims 17 and 18 have been added.

Claim Objections

5. Claims 13 and 14 are objected to because of the following informalities: The amended limitation(s), as stated by the Applicants in claims 13 and 14 are not shown. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

In claim 10, the applicant recites the limitations "the unique identifier", however, there are insufficient prior antecedent basis for these limitations in the claim. The remaining dependent claims 11-14 are also rejected for fully incorporating the deficiencies of the base claim(s) from which they depend.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claimed limitations " voice", in claim 8 are not clearly described in the specification as originally filed and this constitute new matter. Therefore, an appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 8, 10-13, 17 and 18 are rejected under U.S.C. 103(a) as being unpatentable over Beckmann et al., (U.S 20040176112 A1), (hereinafter Beckmann) in view of Hurtta (U.S 20050151840 A1), (hereinafter Hurtta).

Regarding **claims 1 and 10** Beckmann discloses a mobile communication system/operation control method

comprising:

means for delivering data of an identical service (multicast/paging service) to a plurality of radio terminals (UEs) (see Pars. [0051-59 and 0065]): and

a radio network controller (RNC1, see Fig. 1) a unique indicator assigned to a group (GPI)consisting of the plurality of radio terminals from the means for delivering data of the identical services and that provides a paging message (incoming message) to each of the plularity of radio terminals within the group with an identifier (GI) corresponding to the unique indicator (see Pars. [0064-66]);

wherein the means for delivering data delivers the paging message to said each of the plurality of radio terminals using the identifier corresponding to the unique indicators and

wherein the paging message includes information for paging (see Par. [0066-67]) with respect to each of the radio terminals in the group which receive delivery of the service (see Pars. [0021-22]) based on identification information peculiar to the service (group ID GPI1, see Pars. [0077-85]); but fails to teach the receiving means of the controller.

Hurtta teaches the controlling means (see Par. [0049-0055]).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Hurtta into the system of Beckmann for the benefit of achieving a system that include MBCS that provides that controlling purpose of sending or forwarding MBMS data (see, Par. [0038])

Regarding **claim 2,** Beckmann further discloses the mobile communication system according to claim 1, wherein the information for paging includes a downlink common channel (paging message channel is S-CPCH), which sends the paging message, and a paging indicator channel (paging indicator channel PICH, **see** Par. [0064]), which accompanies the downlink common channel and sends information indicating (paging message see Par. [0036]) presence or absence of an incoming call with respect to a radio terminal receiving delivery of the service (radio network informs the respective mobile station by means of paging indicator channel that messages are waiting to be retrieved, **see** Par. [0036]), and

the information indicating presence or absence (waiting message) of an incoming call and transmission timing (paging indicator channel last for 10ms and it is in 300 bits

long, **see** Par. [0042] and Fig. 3) of the information are generated according to identification information peculiar to the service.

Regarding **claim 3,** Beckmann further discloses the mobile communication system according to claim 2, wherein the identification information peculiar to the service is superimposed on an indication bit (the first 288 bits are used to transmit paging Indicators, **see** Par. [0042]) for a paging group indicating presence (waiting message, **see** Par. [0040]) or absence of a voice incoming call in the paging indicator channel (the first 288 bits are used to transmit paging Indicators and the remaining 12 bits are not part of the PICH and are not to be transmitted, **see** Pars. [0042-45] and Fig. 3).

Regarding **claim 4,** Beckmann further discloses the mobile communication system according to claim 1, wherein the information peculiar to the service is notified to said radio terminals in said group receiving the service (multicast paging), and said radio terminals in said group receives the information for paging on the basis of the information peculiar to the service (subscriber to group service would have to be informed about incoming message in a dedicated manner, **see** Par. [0036]).

Regarding claims **8 and 13** Beckmann discloses the mobile communication system (see Fig. 1) according to claims 3 and 11, wherein the information indicating presence or absence voice incoming call the (Paging Indicator: PI) is determined according to the following expression:

PI=(DRXindex) mod (Np),

DRXindex=(TMGI) div (8192)

Np=(18, 36, 72, 144) and

GP1=Temporary Mobile Group Identify (the identification information peculiar to the service) (IMGI being TMGI, **see** Pars. [0040-45]) and (Par. [0022]) and Par. [0083 and 0071

Regarding **claim 11,** Beckmann discloses a radio network controller (RNC 1, **see** Fig. 1) according to claim 10, wherein the information for paging includes a downlink common channel (paging message channel is S-CPCH), which sends a paging message, and a paging indicator channel (paging indicator channel PICH, **see** Par. [0064]), which accompanies the downlink common channel and sends information indicating presence or absence of an incoming call (see Par. [0022]) with respect to a radio terminal receiving delivery of the service (radio network informs the respective mobile station by means of paging indicator channel that messages are waiting to be retrieved, **see** Par. [0036]), and said means generates the information indicating (paging message **see** Par. [0036]) presence or absence of an incoming call (waiting message)and

transmission timing (paging indicator channel last for 10ms and it is in 300 bits long, **see** Par. [0042]) of the information according to identification information peculiar to the service.

Regarding **claim 12,** Beckmann discloses a radio network controller according to claim 11, wherein the identification information peculiar to the service is superimposed on an indication bit (the first 288 bits are used to transmit paging Indicators, **see** Par. [0042]) for a paging group (incoming call group) indicating presence (waiting message, **see** Par. [0040]) or absence of a voice incoming call in the paging indicator channel (the first 288 bits are used to transmit paging Indicators and the remaining 12 bits are not part of the PICH and are not to be transmitted, **see** Pars. [0042-45]).

Regarding **claim 17**, Beckmann teaches a radio network controller (RNC 1, see Fig. 1), and receiving a paging message (incoming call) to be provided to at least one of the plurality of radio terminals in the particular group of radio terminals (see Par. [0030-40 and 0064-66]); but fails to teach a method of delivering signals in a mobile communication system comprising

assigning, by a broadcast multicast service center (MBSC 50 send MBMS data, see Par. [0038]), a temporary mobile group identifier (IMGI, see Pars. [0047 and 0055]) as a unique value to each of a plurality of radio terminals assigned to a particular group of radio terminals;

receiving, by the broadcast multicast service center, a request from another radio terminal to be included in the particular group of radio terminals

outputting the request from the another radio terminal from the broadcast multicast service center to a radio network controller,

outputting the paging message from the radio network controller to the broadcast multicast service center with an identifier that corresponds to the temporary mobile group identifier for the particular group of radio terminals; and outputting, by the broadcast multicast service center to each of the plurality of radio terminals in the particular group of radio terminals, the paging message together with the temporary mobile group identifier.

Hurtta teaches a method of delivering signals in a mobile communication system comprising;

assigning, by a broadcast multicast service center (MBSC 50 send MBMS data, see Par. [0038]), a temporary mobile group identifier (IMGI, see Pars. [0047 and 0055]) as a unique value to each of a plurality of radio terminals assigned to a particular group of radio terminals;

receiving, by the broadcast multicast service center, a request from another radio terminal to be included in the particular group of radio terminals(see Par. [0052 and 0057] and steps1-6 of figure 7)

outputting the request from the another radio terminal from the broadcast multicast service center to a radio network controller (see Pars. [0052 and 0055]),

outputting the paging message from the radio network controller to the broadcast multicast service center with an identifier that corresponds to the temporary mobile group identifier for the particular group of radio terminals; and outputting, by the broadcast multicast service center to each of the plurality of radio terminals in the particular group of radio terminals, the paging message together with the temporary

mobile group identifier (see Pars. [0047,0055-56]); but fails to teach receiving, by the radio network controller, a paging message to be provided to at least one of the plurality of radio terminals in the particular group of radio terminals.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Hurtta into the system of Beckmann for the benefit of achieving a system that include MBCS that provides that controlling purpose of sending or forwarding MBMS data (see, Par. [0038]).

Regarding **claim 18**, as recited in claim 1, Beckmann further discloses the mobile communication system, wherein the paging message sent to each of the radio terminals in the group does not include any information used to uniquely identify any of the radio terminals in the group (group messages are transmitted and all UEs read the GPI, see Pars. [0065-68]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckmann in view of Terry (U.S. 20040023672 A1)

Regarding claims **9 and 14,** Beckmann discloses the radio network controller (RNC 1) according to claims 1 and 11, wherein the transmission timing (Paging Occasion: PO) (PICH transmission time, see Par. [0042]) and TMGI(IMGI, see Par. [0083 and 0071]), but the combination of Beckmann and Hurtta fail to teach the expression:

PO=[{(TMGI) div (K)}mod {(DRX cycle length) div (PBP)}]*PBP+n*(DRX cycle length)+Frame Offset, TMGI=Temporary Mobile Group Identify (the identification information peculiar to the service) K: the number of existing paging channels, DRX (Discontinuous Reception) cycle length: a period for receiving the paging indicator channel, PBP: Paging Block Periodicity, n: an integer including zero (up to a maximum number of an SFN (Serial Frame Number)).

Terry discloses a paging occasion express (see Par. [0014-23]; where TMGI corresponds to IMGI) and (Par. [0083 and 0071])

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Terry into the system of Beckmann and Hurrta for the benefit of achieving a multicast paging system with an expression indicating paging occasion

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Widergen et al. (U.S. 5,890,064) teaches a mobile telecommunications network having integrated wireless office system.

O' Neil et al. (U.S. 5,963,864) teaches method and system for automatic connection telephone calls to multiple device having different directory numbers.

Harlow et al., (U.S. 5,206,901) teaches a method and apparatus for alerting multiple telephones for an incoming call.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwasi Karikari
Patent Examiner.

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

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